

AMENDMENTS TO THE CLAIMS

Please amend the claims as shown below, without prejudice or disclaimer. This listing of the claims replaces all prior listings.

1. (Currently Amended) An expression vector comprising the nucleic acid sequence as illustrated in SEQ ID NO.: 1 or 3 or a fragment thereof.
2. (Original) The expression vector of claim 1 wherein the vector is a plasmid or a viral vector.
3. (Original) The expression vector of claim 2 wherein the viral vector is selected from the group consisting of poxvirus, alphavirus, adenovirus, retrovirus, herpesvirus, and adeno-associated virus.
4. (Original) The expression vector of claim 3 wherein the viral vector is a poxvirus selected from the group consisting of vaccinia, NYVAC, avipox, canarypox, ALVAC, ALVAC(2), fowlpox, and TROVAC.
5. (Original) The expression vector of claim 4 wherein the viral vector is a poxvirus selected from the group consisting of NYVAC, ALVAC, and ALVAC(2).
6. (Currently Amended) The expression vector of claim 1 further comprising at least one nucleic acid encoding an additional tumor-associated antigen.
7. (Original) The expression vector of claim 6 wherein the vector is a plasmid or a viral vector.
8. (Original) The expression vector of claim 7 wherein the viral vector is selected from the group consisting of poxvirus, alphavirus, adenovirus, retrovirus, herpesvirus, and adeno-associated virus.
9. (Original) The expression vector of claim 8 wherein the viral vector is a poxvirus selected from the group consisting of vaccinia, NYVAC, avipox, canarypox, ALVAC, ALVAC(2), fowlpox, and TROVAC.
10. (Original) The expression vector of claim 9 wherein the viral vector is a poxvirus selected from the group consisting of NYVAC, ALVAC, and ALVAC(2).
11. (Original) The expression vector of claim 1 further comprising at least one nucleic sequence encoding an angiogenesis-associated antigen.

12. (Original) The expression vector of claim 11 wherein the vector is a plasmid or a viral vector.
13. (Original) The expression vector of claim 12 wherein the viral vector is selected from the group consisting of poxvirus, alphavirus, adenovirus, retrovirus, herpesvirus, and adeno-associated virus.
14. (Original) The expression vector of claim 13 wherein the viral vector is a poxvirus selected from the group consisting of vaccinia, NYVAC, avipox, canarypox, ALVAC, ALVAC(2), fowlpox, and TROVAC.
15. (Original) The expression vector of claim 14 wherein the viral vector is a poxvirus selected from the group consisting of NYVAC, ALVAC, and ALVAC(2).
16. (Original) The expression vector of claim 6 further comprising at least one nucleic sequence encoding an angiogenesis-associated antigen.
17. (Original) The expression vector of claim 16 wherein the vector is a plasmid or a viral vector.
18. (Original) The expression vector of claim 17 wherein the viral vector is selected from the group consisting of poxvirus, alphavirus, adenovirus, retrovirus, herpesvirus, and adeno-associated virus.
19. (Original) The expression vector of claim 17 wherein the viral vector is a poxvirus selected from the group consisting of vaccinia, NYVAC, avipox, canarypox, ALVAC, ALVAC(2), fowlpox, and TROVAC.
20. (Currently Amended) The poxvirus of claim 1819 wherein the viral vector is a poxvirus selected from the group consisting of NYVAC, ALVAC, and ALVAC(2).
21. (Currently Amended) The expression vector selected from the group consisting of the expression vector of claim 1, 6, 11 or and 16 further comprising at least one nucleic acid sequence encoding a co-stimulatory component.
22. (Currently Amended) The expression vector of claim 2221 wherein the vector is a plasmid or a viral vector.
23. (Currently Amended) The expression vector of claim 2322 wherein the viral vector is selected from the group consisting of poxvirus, alphavirus, adenovirus, retrovirus, herpesvirus, and adeno-associated virus.

24. (Currently Amended) The expression vector of claim 2423 wherein the viral vector is a poxvirus selected from the group consisting of vaccinia, NYVAC, avipox, canarypox, ALVAC, ALVAC(2), fowlpox, and TROVAC.

25. (Currently Amended) The poxvirus of claim 1824 wherein the viral vector is a poxvirus selected from the group consisting of NYVAC, ALVAC, and ALVAC(2).

26. (Currently Amended) A composition comprising an expression vector in a pharmaceutically acceptable carrier, said vector comprising the nucleic acid sequence shown in SEQ ID NO.: 1 or 3 or a fragment thereof.

27. (Original) The expression vector of claim 26 wherein the vector is a plasmid or a viral vector.

28. (Original) The expression vector of claim 27 wherein the viral vector is selected from the group consisting of poxvirus, alphavirus, adenovirus, retrovirus, herpesvirus, and adeno-associated virus.

29. (Original) The expression vector of claim 28 wherein the viral vector is a poxvirus selected from the group consisting of vaccinia, NYVAC, avipox, canarypox, ALVAC, ALVAC(2), fowlpox, and TROVAC.

30. (Original) The poxvirus of claim 29 wherein the viral vector is a poxvirus selected from the group consisting of NYVAC, ALVAC, and ALVAC(2).

31. (Withdrawn) A method for preventing or treating cancer comprising administering to a host an expression vector comprising the nucleic acid sequence illustrated in SEQ ID NO.: 25 or 27 or a fragment thereof.

32. (Withdrawn) The expression vector of claim 31 wherein the vector is a plasmid or a viral vector.

33. (Withdrawn) The expression vector of claim 32 wherein the viral vector is selected from the group consisting of poxvirus, alphavirus, adenovirus, retrovirus, herpesvirus, and adeno-associated virus.

34. (Withdrawn) The expression vector of claim 33 wherein the viral vector is a poxvirus selected from the group consisting of vaccinia, NYVAC, avipox, canarypox, ALVAC, ALVAC(2), fowlpox, and TROVAC.

35. (Withdrawn) The poxvirus of claim 34 wherein the viral vector is a poxvirus selected from the group consisting of NYVAC, ALVAC, and ALVAC(2).

36. (Withdrawn) A peptide derived from BFA4 as shown in Table V, VI or VII.
37. (Withdrawn) A method for immunizing a host against the tumor antigen BFA4 comprising administering to the patient a peptide shown in Table V, VI or VII, either alone or in combination with another agent, where the individual components of the combination are administered simultaneously or separately from one another.
38. (Withdrawn) A peptide derived from BCY1 as shown in Table VIII or IX.
39. (Withdrawn) A method for immunizing a host against the tumor antigen BCY1 comprising administering to the patient a peptide shown in Table VIII or IX, either alone or in combination with at least one other agent, where the individual components of the combination are administered simultaneously or separately from one another.
40. (New) The expression vector of claim 6 wherein the at least one additional tumor-associated antigen has the amino acid sequence of SEQ ID NO:4.
41. (New) The expression vector of claim 11 further comprising at least one additional nucleic acid sequence encoding a tumor-associated antigen having the amino acid sequence of SEQ ID NO:4.
42. (New) The expression vector of claim 16 wherein the at least one additional tumor-associated antigen has the amino acid sequence of SEQ ID NO:4.
43. (New) The expression vector of claim 21 wherein the at least one additional tumor-associated antigen has the amino acid sequence of SEQ ID NO:4.
44. (New) An expression vector comprising a nucleic acid sequence encoding a polypeptide having the amino acid sequence of SEQ ID NO:2.
45. (New) The expression vector of claim 44 wherein the vector is a plasmid or a viral vector.
46. (New) The expression vector of claim 45 wherein the viral vector is selected from the group consisting of poxvirus, alphavirus, adenovirus, retrovirus, herpesvirus, and adeno-associated virus.
47. (New) The expression vector of claim 46 wherein the viral vector is a poxvirus selected from the group consisting of vaccinia, NYVAC, avipox, canarypox, ALVAC, ALVAC(2), fowlpox, and TROVAC.
48. (New) The expression vector of claim 47 wherein the viral vector is a poxvirus selected from the group consisting of NYVAC, ALVAC, and ALVAC(2).

49. (New) The expression vector of claim 44 further comprising a nucleic acid encoding at least one additional tumor-associated antigen.

50. (New) The expression vector of claim 49 wherein the vector is a plasmid or a viral vector.

51. (New) The expression vector of claim 50 wherein the viral vector is selected from the group consisting of poxvirus, alphavirus, adenovirus, retrovirus, herpesvirus, and adeno-associated virus.

52. (New) The expression vector of claim 51 wherein the viral vector is a poxvirus selected from the group consisting of vaccinia, NYVAC, avipox, canarypox, ALVAC, ALVAC(2), fowlpox, and TROVAC.

53. (New) The expression vector of claim 52 wherein the viral vector is a poxvirus selected from the group consisting of NYVAC, ALVAC, and ALVAC(2).

54. (New) The expression vector of claim 44 further comprising at least one nucleic sequence encoding an angiogenesis-associated antigen.

55. (New) The expression vector of claim 54 wherein the vector is a plasmid or a viral vector.

56. (New) The expression vector of claim 55 wherein the viral vector is selected from the group consisting of poxvirus, alphavirus, adenovirus, retrovirus, herpesvirus, and adeno-associated virus.

57. (New) The expression vector of claim 56 wherein the viral vector is a poxvirus selected from the group consisting of vaccinia, NYVAC, avipox, canarypox, ALVAC, ALVAC(2), fowlpox, and TROVAC.

58. (New) The expression vector of claim 57 wherein the viral vector is a poxvirus selected from the group consisting of NYVAC, ALVAC, and ALVAC(2).

59. (New) The expression vector selected from the group consisting of the expression vector of claims 44, 49 and 54 further comprising at least one nucleic acid sequence encoding a co-stimulatory component.

60. (New) The expression vector of claim 59 wherein the vector is a plasmid or a viral vector.

61. (New) The expression vector of claim 60 wherein the viral vector is selected from the group consisting of poxvirus, alphavirus, adenovirus, retrovirus, herpesvirus, and adeno-associated virus.
62. (New) The expression vector of claim 61 wherein the viral vector is a poxvirus selected from the group consisting of vaccinia, NYVAC, avipox, canarypox, ALVAC, ALVAC(2), fowlpox, and TROVAC.
63. (New) The poxvirus of claim 62 wherein the viral vector is a poxvirus selected from the group consisting of NYVAC, ALVAC, and ALVAC(2).
64. (New) A pharmaceutical composition comprising an expression vector of claim 44.
65. (New) A pharmaceutical composition comprising an expression vector of claim 49.
66. (New) A pharmaceutical composition comprising an expression vector of claim 54.